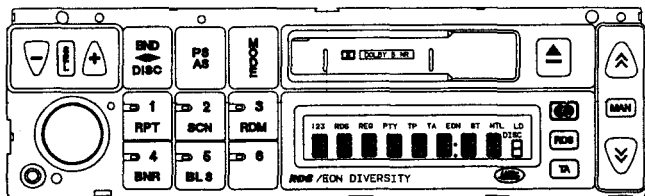


clarion Service Manual

Published by Service Information Section



LAND ROVER RDS/FM • MPX/MW/LW Radio Cassette Stereo with CD Changer Control

Model **PU-9836A**
 (Part No. PRC 7618)

■ SPECIFICATIONS:

[Radio section]

Circuit system:	Superheterodyne
Tuning system:	Electronic tuning
Receiver range:	LW 153kHz to 279kHz MW 531kHz to 1,602kHz FM 87.5MHz to 108MHz
Intermediate frequency:	LW 450kHz MW 450kHz FM 10.7MHz
Quieting sensitivity:	LW Less than 42dB (at 20dB S/N) MW Less than 35dB (at 20dB S/N) FM Less than 12dB (at 30dB S/N)
Separation:	FM More than 20dB
Auto tuning stop sensitivity:	LW DX 20~40dB LO 45~65dB MW DX 20~40dB LO 45~65dB FM DX 15~35dB LO 40~60dB

[Tape section]

Reproduction system:	4 track, 2 channel stereo cassette tape playback
Tape speed:	4.76cm/sec (1-7/8 ips)
Wow and flutter:	0.15% (W.R.M.S)
S/N ratio:	More than 56/48dB, Dolby B ON/OFF (120 μs) More than 58/50dB, Dolby B ON/OFF (70 μs)
Cross talk:	More than 40dB
Separation:	More than 30dB
FF/REW time:	Less than 110sec. (C-60)

[Synthesis]

Power Supply voltage:	DC 14.0V (10.8V to 15.6V) Negative ground
Current consumption:	Less than 3mA (at ACC OFF)
Load impedance:	660Ω
Line out level:	0.125V ± 6dB
Quieting power output:	More than 8W × 4
Dimensions:	Width 178mm Height 50mm Depth 160mm
Weight:	1.5kg

■ COMPONENTS:

• PU-9836A			
Main unit			1
Mounting bracket	300-9550-00		1
[Removal tool	341-1446-01		1]

■ ANTI-THEFT-SYSTEM:

- Releasing the ANTI-THEFT SYSTEM (When reinserting the car stereo or reconnecting the battery.)
- 1. Make the necessary wire connections.
- 2. Turn on POWER switch. ("CODE IN" is displayed.)
- 3. Using PRESET button 1 to 6, input the secret number.

After the last code number is entered the radio will operate.

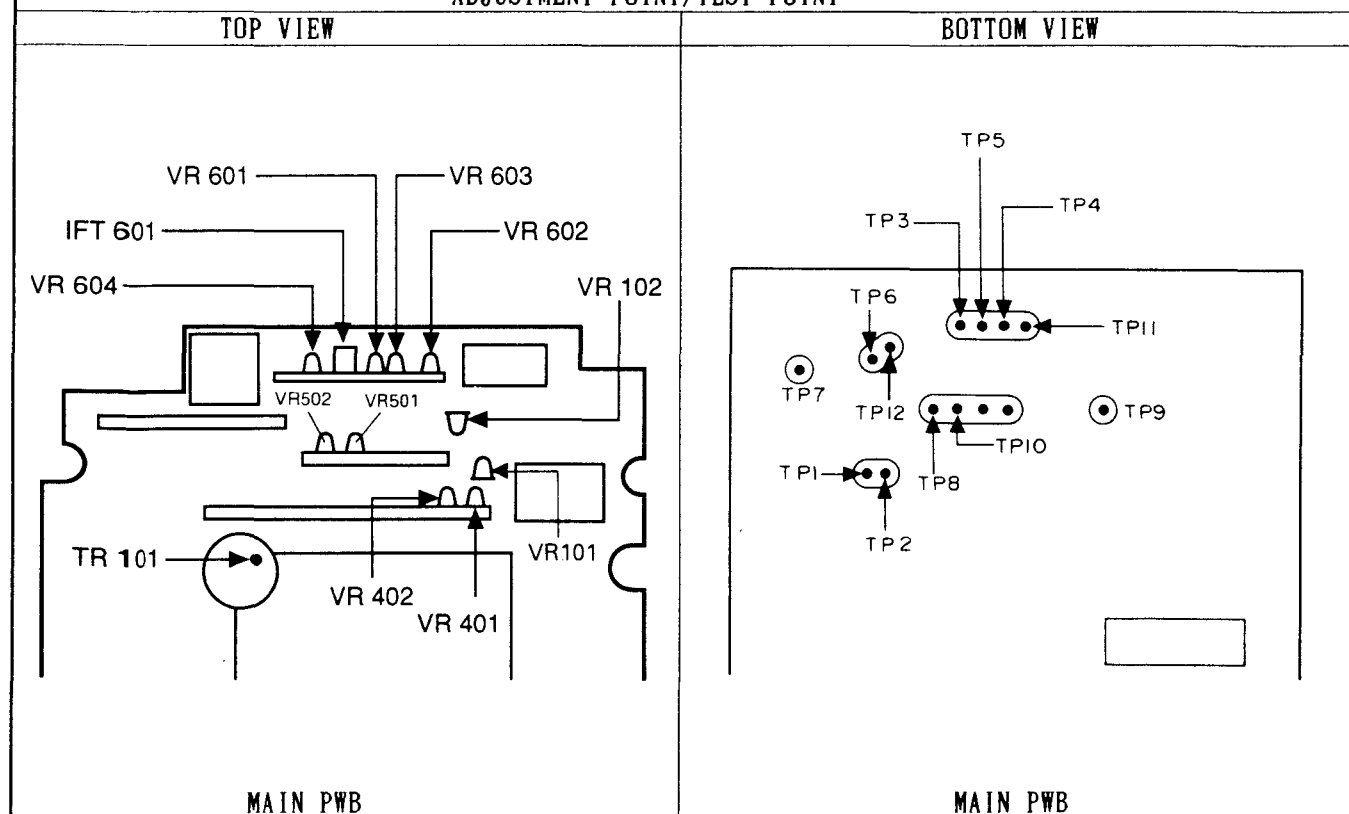
- In case the wrong code was entered.
- 1. Finish entering all four digits.
- 2. Press BAND button for approximately two seconds.
- 3. Input the correct code.
- Waiting time for releasing the ANTI-THEFT SYSTEM (If the wrong code was entered at three times.)
- 1. Wait for more than an hour at the necessary wire connections.
- 2. Press BAND button for two seconds.
- 3. Input the correct code.

• Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
 • "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

■ ADJUSTMENT:

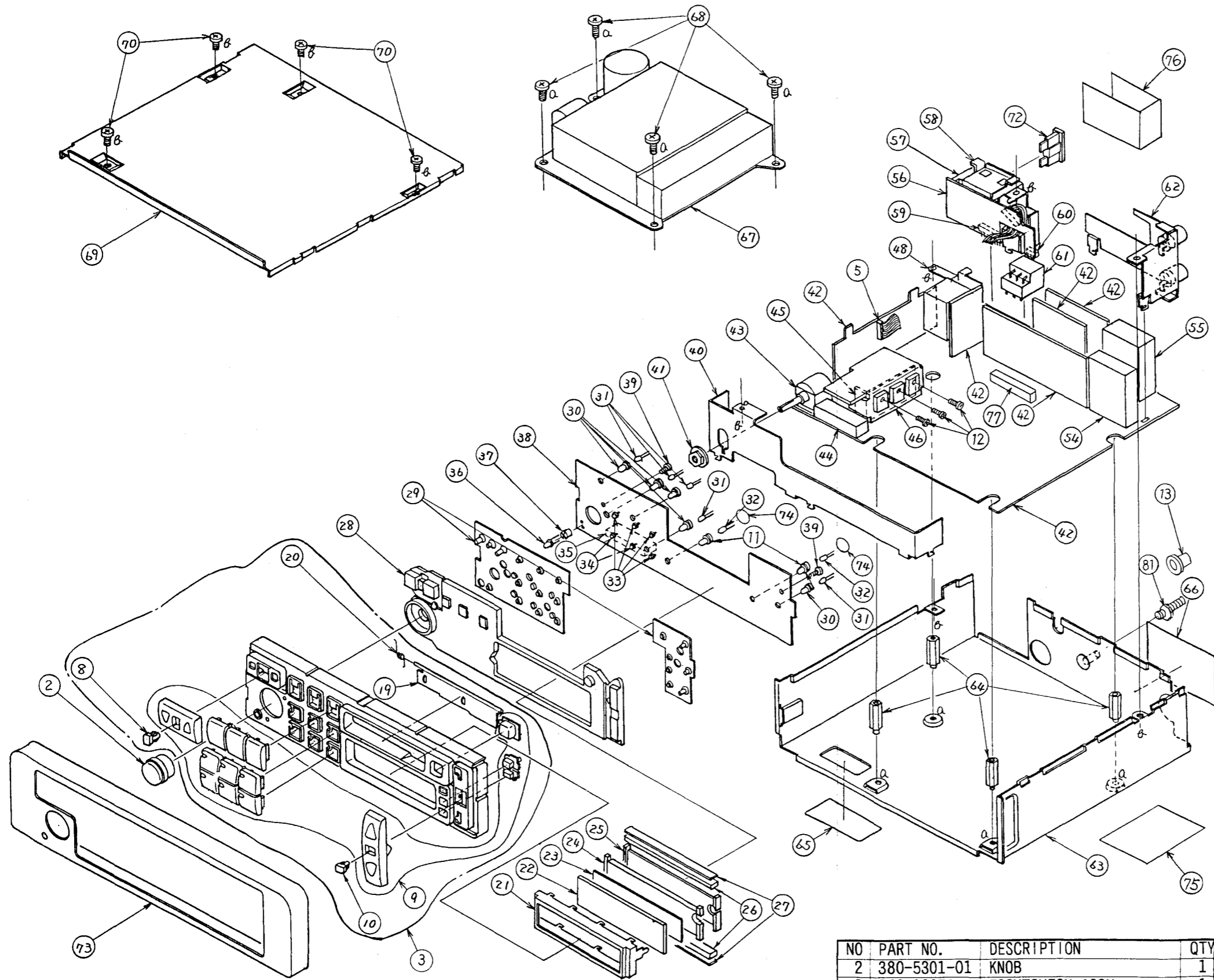
ITEM	TEST-POINT	PROCEDURE
0V	IFT601	1. CONNECT THE DIGITAL VOLT-METER TO TP3 AND TP4. 2. INPUT THE 98.1MHz/30dB SIGNAL(no MOD), AND ADJUST THE READING OF DIGITAL VOLT-METER TO $0 \pm 20\text{mV}$ BY IFT601.
Limiter	VR602	1. INPUT THE 98.1MHz/65dB SIGNAL(400Hz, 30% MOD). [OUTPUT: 0dB(0.245V)] 2. SET THE SSG OUTPUT TO 10dB, AND ADJUST THE OUTPUT LEVEL TO -3dB BY VR602.
SD	VR601	1. CONNECT BETWEEN TP9 AND TP10(5V). 2. INPUT THE 98.1MHz/23dB SIGNAL(400Hz, 30% MOD). 3. ADJUST VR601 SO THAT THE VOLTAGE OF TP5 IS IN THE RANGE 0V TO 5V.
S-meter	VR102	1. CONNECT THE DIGITAL VOLT-METER TO TP6. 2. INPUT THE 98.1MHz/35dB SIGNAL(400Hz no MOD). 3. ADJUST THE LEVEL TO $2.4 \pm 0.1\text{V}$ BY VR102.
SASC	VR603	1. INPUT THE 98.1MHz/65dB SIGNAL(7KHz 30% MOD). 2. SET THE OUTPUT TO 0dB BY VR603 FULLY COUNTER-CLOCKWISE. (0.775V) 3. SET THE SSG OUTPUT TO 43dB, AND ADJUST VR603 SO THAT THE OUTPUT LEVEL IS -2dB.
Separation	VR604	1. INPUT THE 98.1MHz, CONNECT THE OUTPUT OF A STEREO MODULATOR TO THE EXTERNAL MODULATION TERMINAL, AND INPUT A 65dB SIGNAL. 2. SET THE STEREO MODULATOR TO THE L OR R-ch AND ADJUST VR604 SO THAT THE MAXIMUM SEPARATION IS OBTAINED. (MORE THAN 20dB)
CW	VR501	1. CONNECT THE MILLI VOLT-METER TO TP8. 2. INPUT THE 98.1MHz/65dB SIGNAL(100Hz, MONO) AND ADJUST THE LEVEL TO $1.77\text{V} \pm 1\text{dB}$ BY VR501.
DK	VR502	1. INPUT tTHE 98.1MHz/55dB SIGNAL (no MOD, SK DK on) 2. CONNECT THE OSCILLOSCOPE TO TP9, AND ADJUST VR502 SO THAT THE OSCILLOSCOPE OUTPUT WAVEFORM IS MAXIMUM.
Tape speed	TR101	1. INSERT A TAPE SPEED TEST TAPE (3000Hz). 2. ADJUST THE TAPE SPEED TO $3000 \pm 45\text{Hz}$ BY TR101.
Dolby NR	VR401 VR402	1. INSERT A DOLBY LEVEL TEST TAPE (400Hz-200nWb/m), CONNECT THE MILLI VOLT-METER TO TP1(L) AND TP2(R). 2. ADJUST VR401(L) AND VR402(R) TO OBTAIN AN OUTPUT OF $388\text{mV} \pm 1\text{dB}$.

ADJUSTMENT POINT/TEST POINT



*DIVER FIX(MAIN): Connect TP12 to earth.

■ EXPLODED VIEW • PARTS LIST:

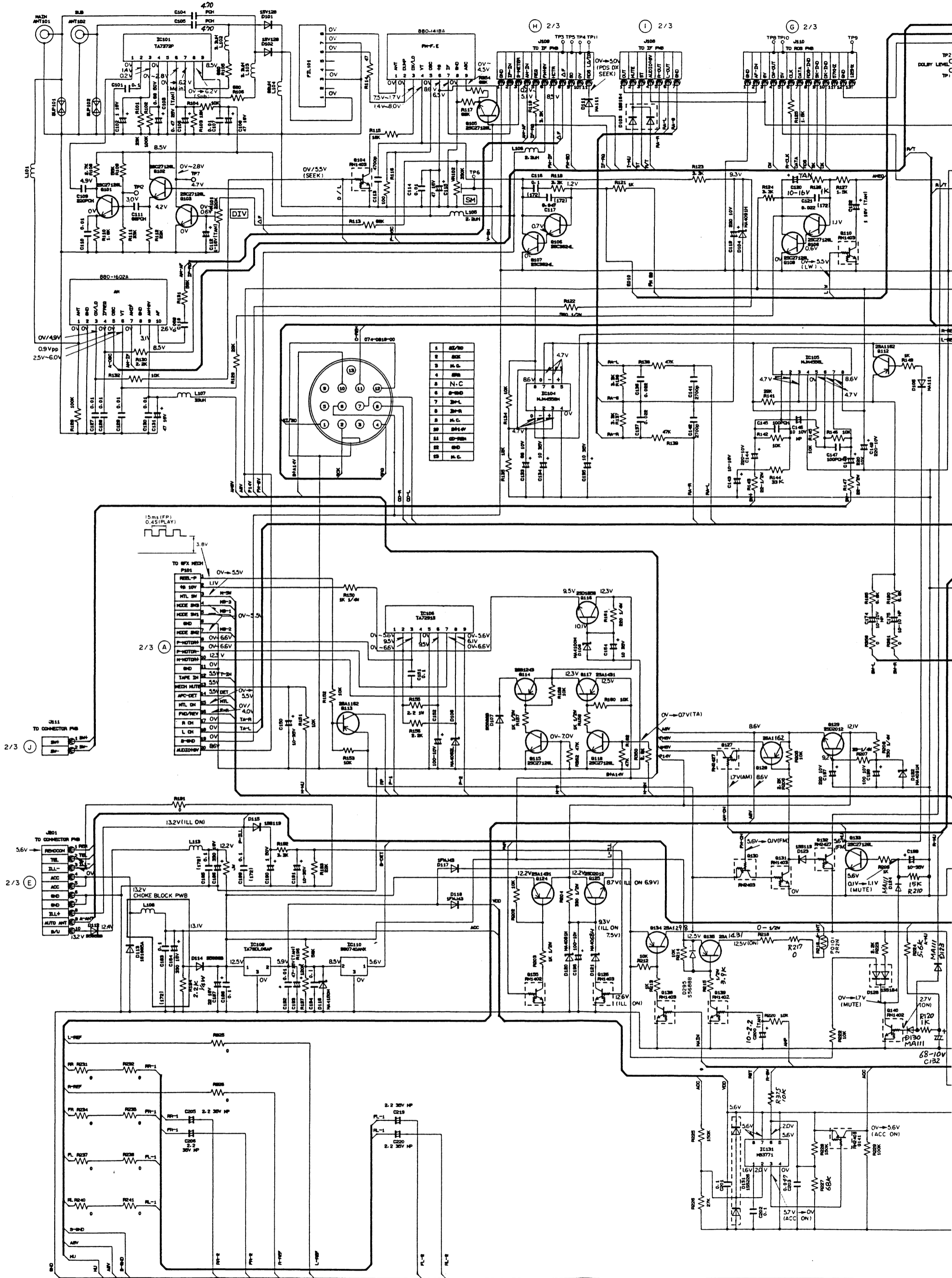


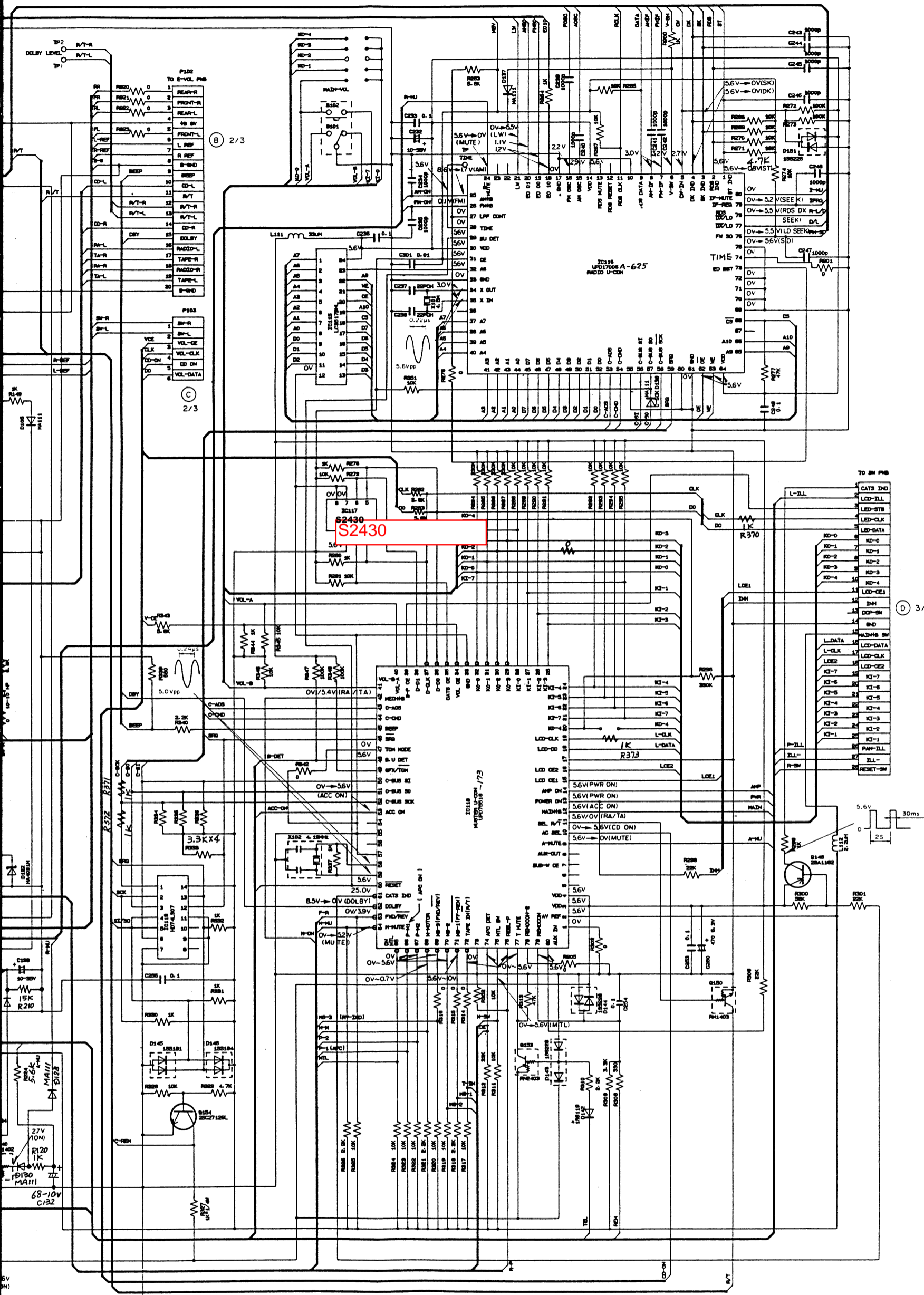
NO	PART NO.	DESCRIPTION	QTY
11	345-7148-06	LAMP CAP	2
12	714-2608-81	MACHINE SCREW	3
13	345-3653-01	SPACER	1
19	320-0391-41	DUSTPROOF-CVR	1
20	750-2309-01	SPRING	1
21	331-0157-00	LCD HOLDER	1
22	379-1005-21	INDICATOR	1
23	335-4512-01	COLOR FILTER	1
24	335-4479-00	BACK LIGHT	1
25	335-4480-00	LCD SPACER	1
26	345-7366-00	RUBBER CONNECTOR	2
27	347-3818-00	SPACER	2
28	335-4477-03	ILLUMI PLATE	1
29	345-5156-01	RUBBER SWITCH	1
30	345-7148-07	LAMP CAP	5
31	017-0345-09	PILOTLAMP	5
32	017-0376-02	PILOTLAMP	2
33	001-0486-04	LED	4
34	001-7009-01	LED	2
35	074-0961-28	OUTLET SOCKET*28P MAIN	1
36	001-0207-00	LED*RED/CATS	1
37	335-4513-00	LED SPACER	1
38	099-9982-02	SWITCH PWB	1
39	702-2005-81	TAP SCREW	2
40	331-0158-00	FRONT PLATE	1
41	722-0368-00	NUT	1
42	099-9981-03	MAIN PWB	1
43	012-5194-00	VARIABLE-R*VOL	1
44	076-0414-28	PLUG*28P-ES	1
45	330-9409-01	HEATSINK HOLDER	1
46	313-1548-01	HEAT SINK	1
48	331-0160-00	CHOKE HOLDER	1
54	880-1602A	MW/LW TUNER BLOCK	1
55	880-1418A	FM TUNER BLOCK	1
57	074-0930-03	OUTLET SOCKET*26P ISO	1
58	330-9391-01	BACK PLATE	1
59	076-0420-02	PLUG*10P	1
60	076-0288-02	PLUG*2P	1
61	074-0818-00	OUTLET SOCKET*13P-BUS	1
62	331-0161-05	ANT-HOLDER	1
63	311-1591-08	LOWER CASE	1
64	716-1461-00	SPACER	4
65	290-4411-00	LABEL	1
66	290-4642-00	LABEL	1
67	930-0735-00	TAPE-MECHANISM*GFX	1
68	716-0878-00	IT-SCREW	4
69	310-1527-00	UPPER CASE	1
70	714-2605-81	MACHINE SCREW	4
72	060-0057-52	AUTO-FUSE*3A	1
73	335-4476-06	PANEL	1
74	353-0359-00	SHADE	2
75	286-7975-02	SETPLATE	1
76	347-3827-00	INSULATOR	1
77	076-0433-20	PLUG*20P	1
81	716-0871-00	STUD BOLT	1

NO	PART NO.	DESCRIPTION	QTY
2	380-5301-01	KNOB	1
3	940-1665A	ESCUTCHEON-ASSY	1
5	854-3230-00	EXTENSION LEAD*8P	1
8	382-3350-01	BUTTON*SEL	1
9	947-0352-07	BUTTON-ASSY	1
10	382-3352-01	BUTTON*MAN	1

CIRCUIT DIAGRAM: 1/3

© MAIN PWB

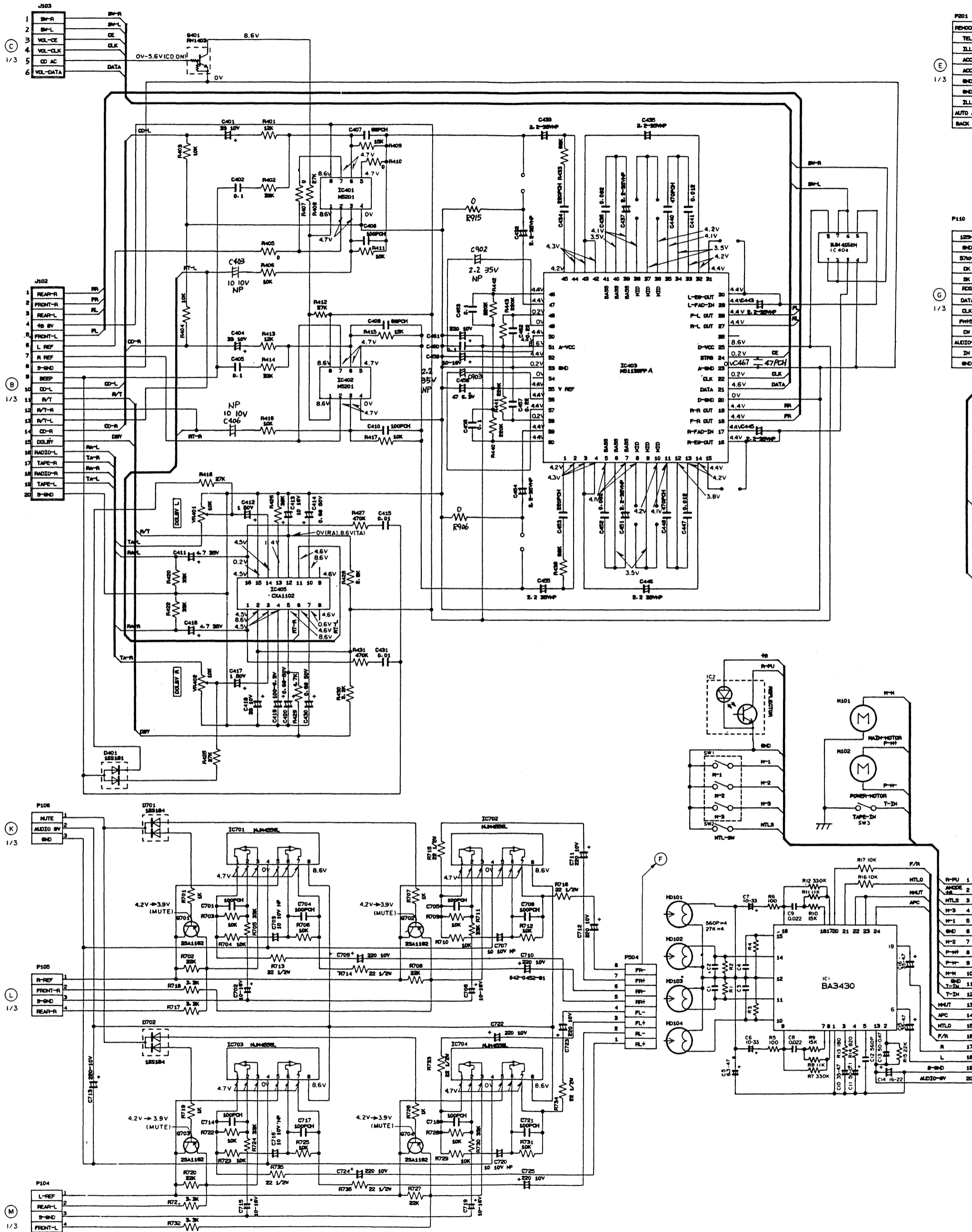




2/3

3/3

TO LINE-OUT PMS	TO LINE-OUT PMS	TO LINE-OUT PMS
40 MUTE	47V	47V
(MUTE)	0	0
56V	47V	47V
	0	0
	47V	47V



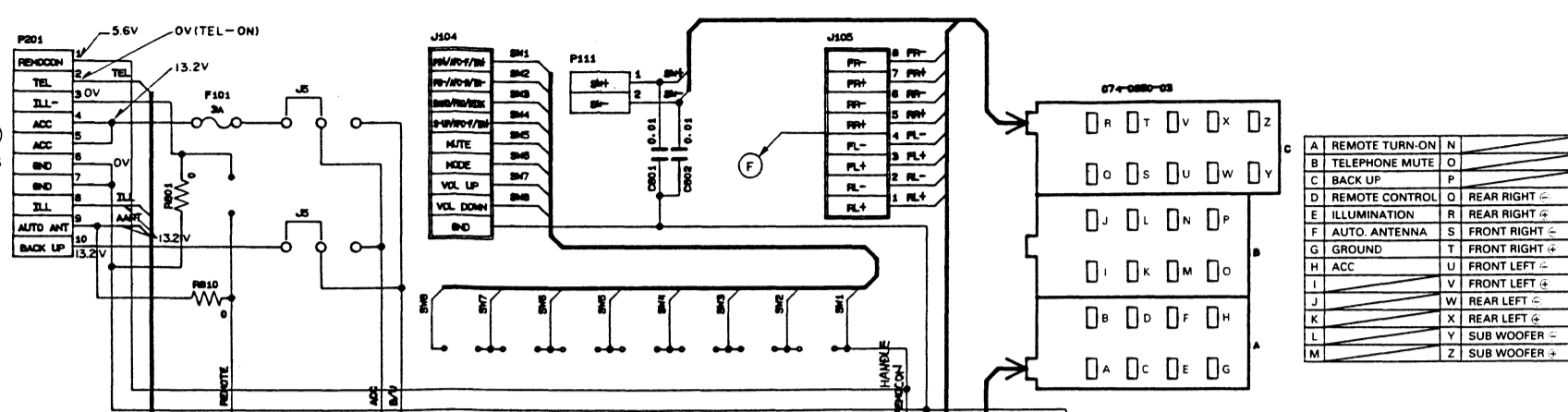
E
1/3

C
1/3

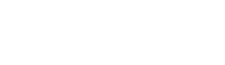
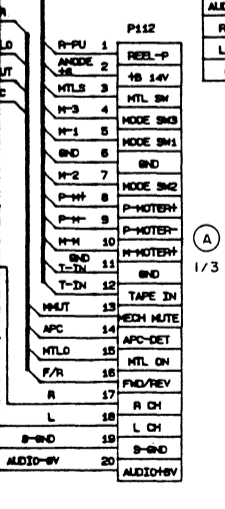
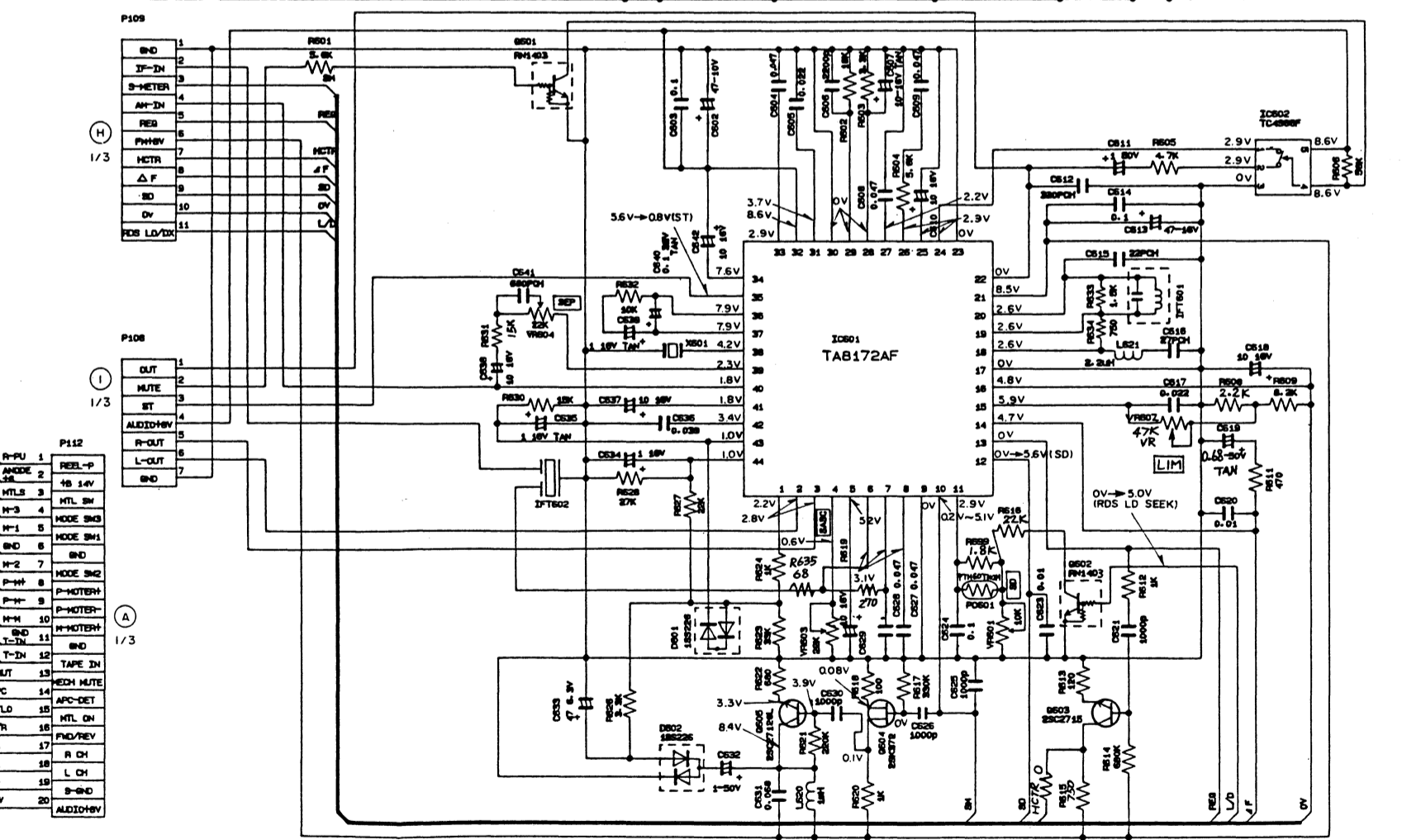
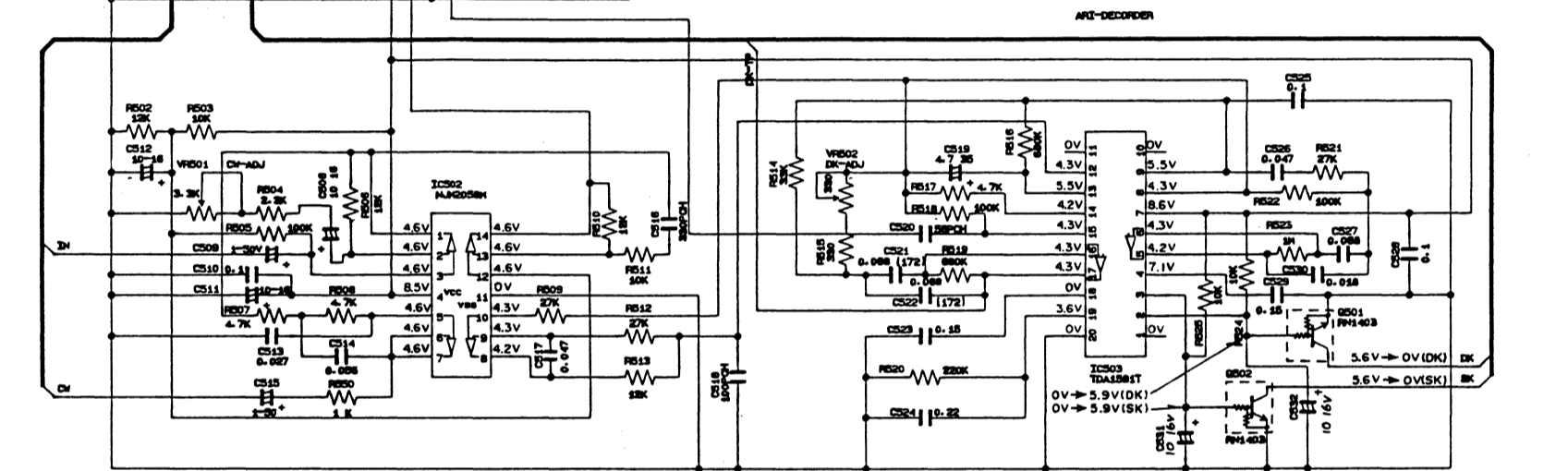
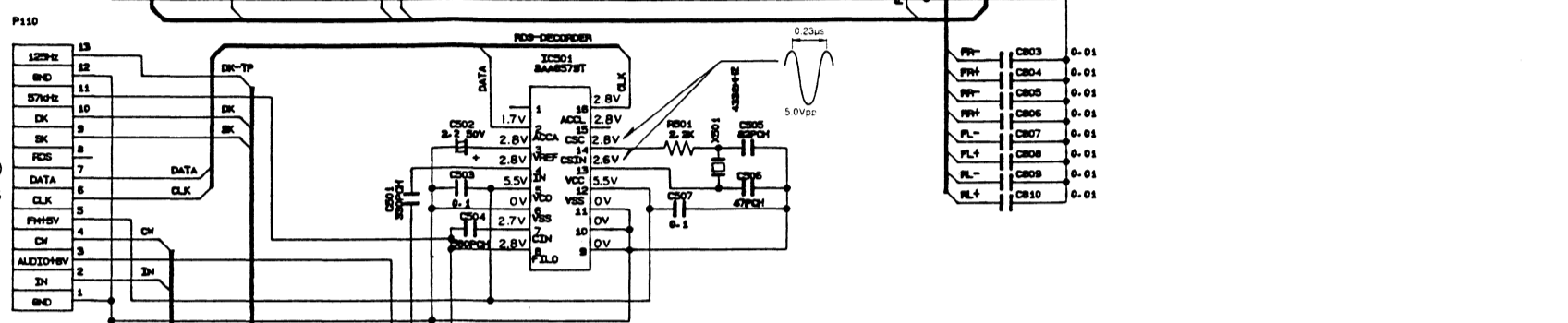
H
1/3

I
1/3

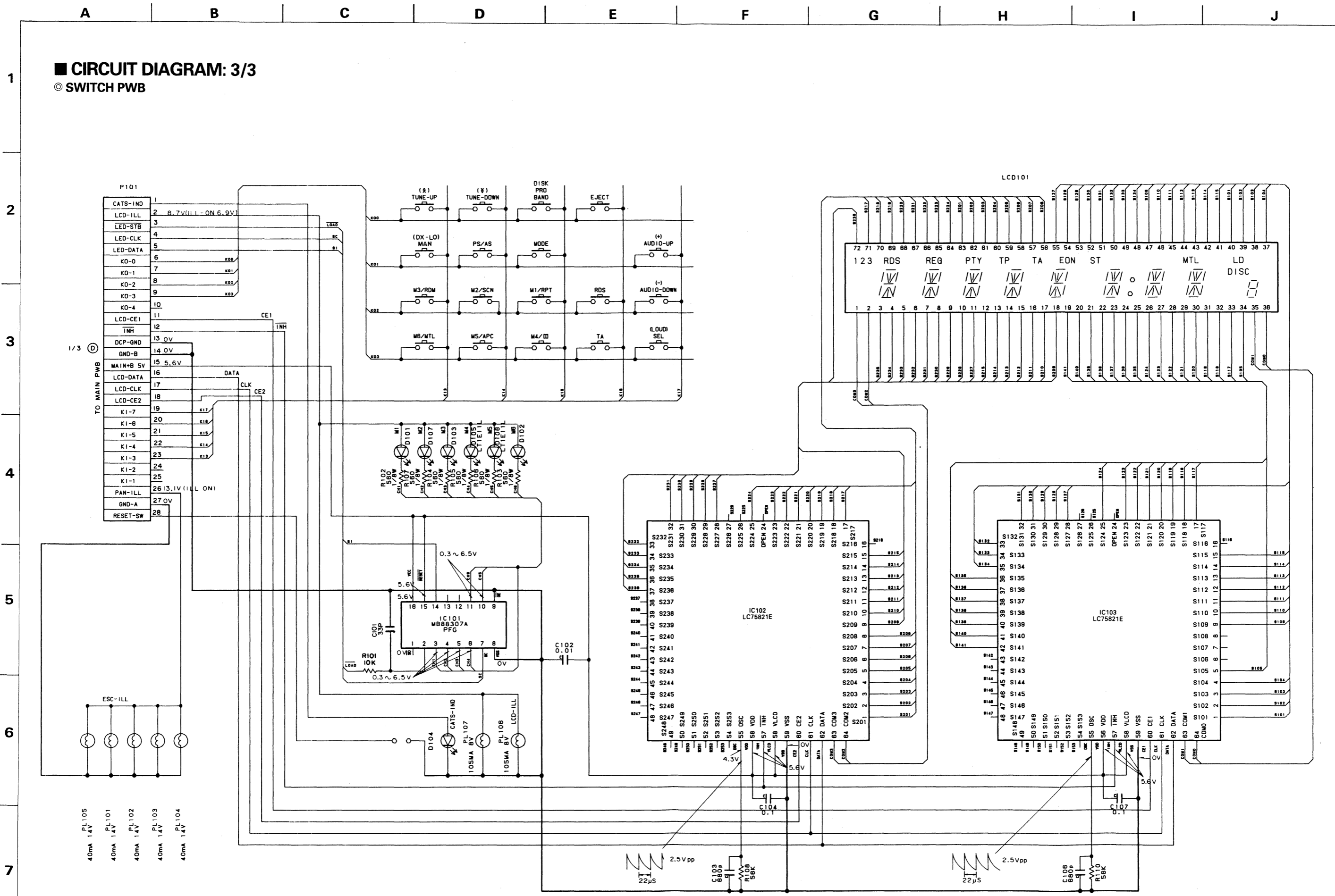
A
1/3



A	REMOTE TURN-ON	N
B	TELEPHONE MUTE	O
C	BACK UP	P
D	REMOTE CONTROL	Q
E	ILLUMINATION	R
F	AUTO. ANTENNA	S
G	GROUND	T
H	ACC	U
I		V
J		W
K		X
L		Y
M		Z

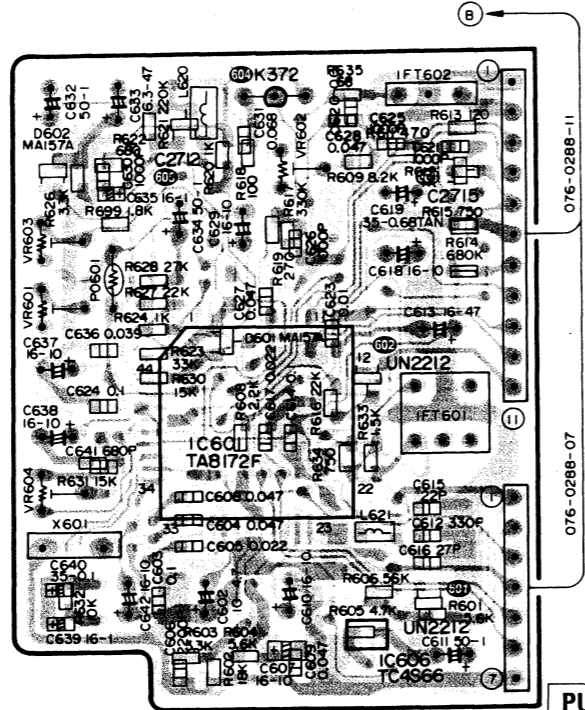
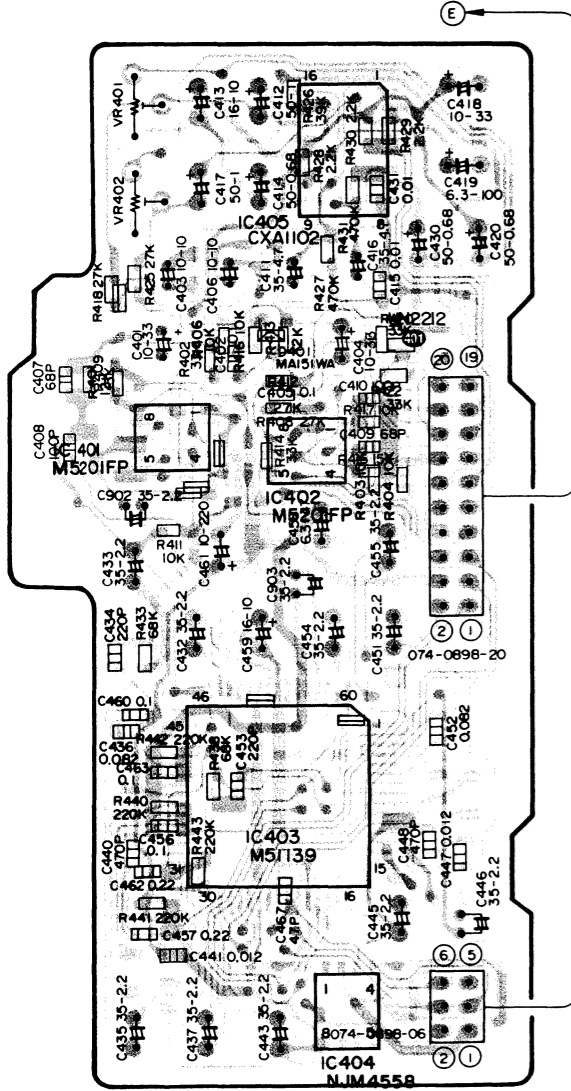
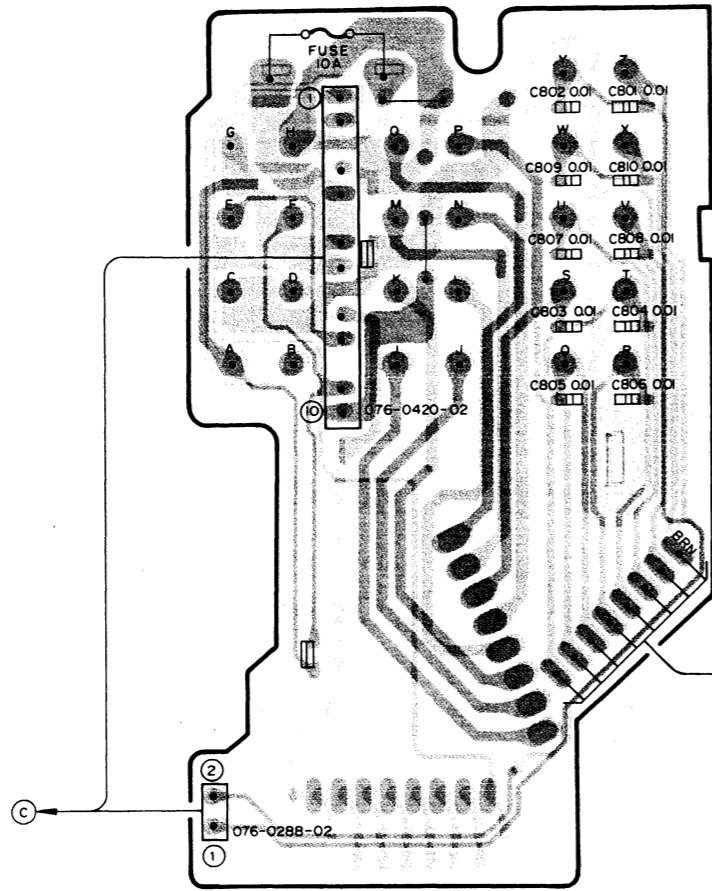
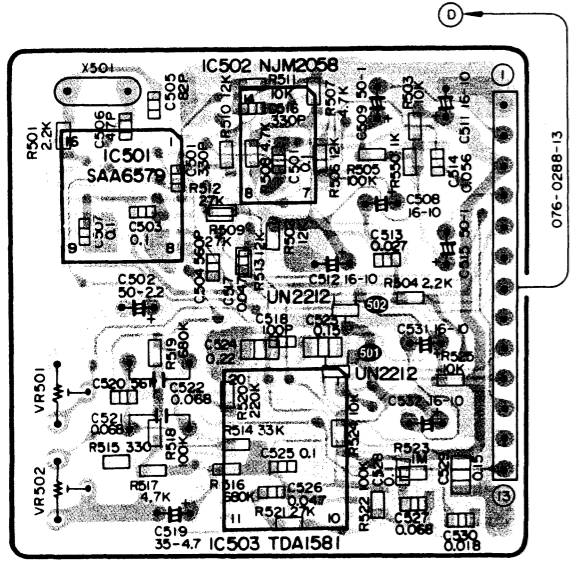
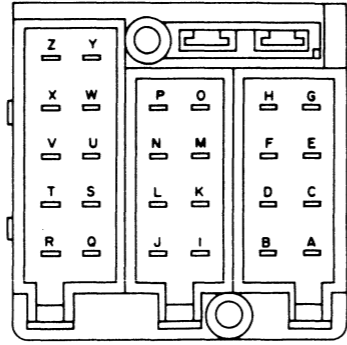


CIRCUIT DIAGRAM: 3/3
 © SWITCH PWB



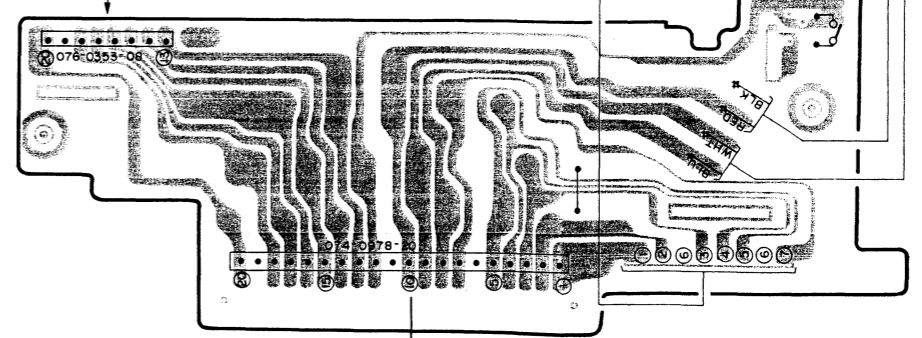
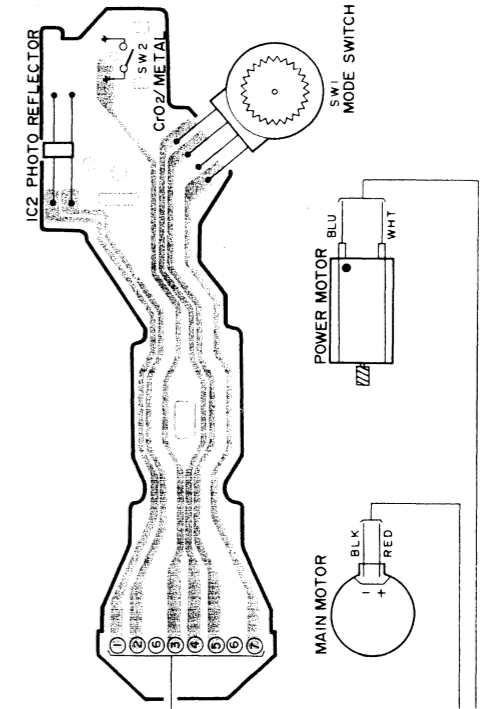
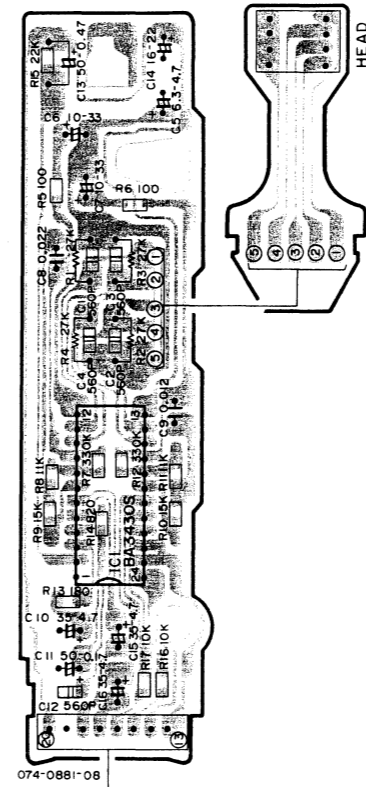
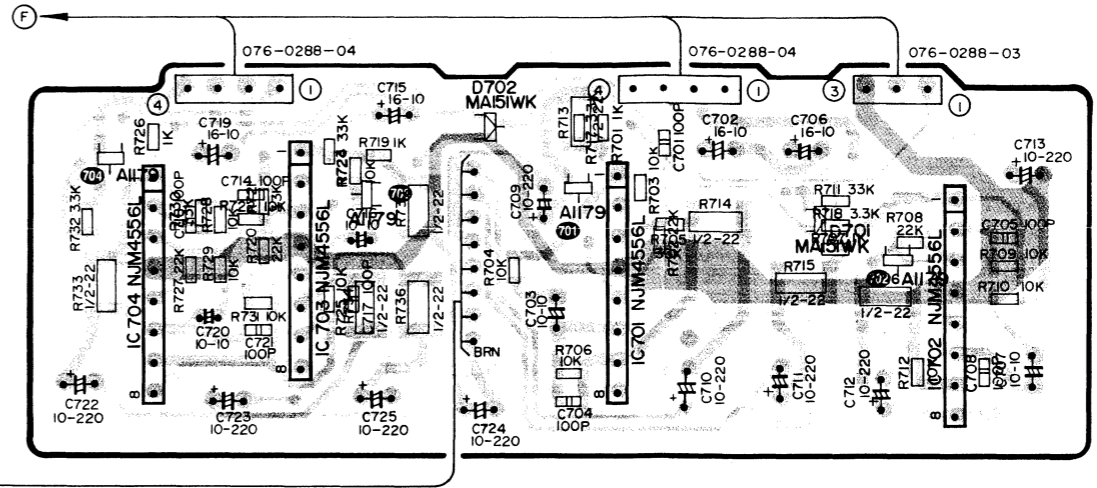
■ PRINTED WIRING BOARD: 2/2

A	REMOTE TURN-ON	N
B	TELEPHONE MUTE	O
C	BACK UP	P
D	REMOTE CONTROL	Q
E	ILLUMINATION	R
F	AUTO ANTENNA	S
G	GROUND	T
H	ACC	U
I		V
J		W
K		X
L		Y
M		Z



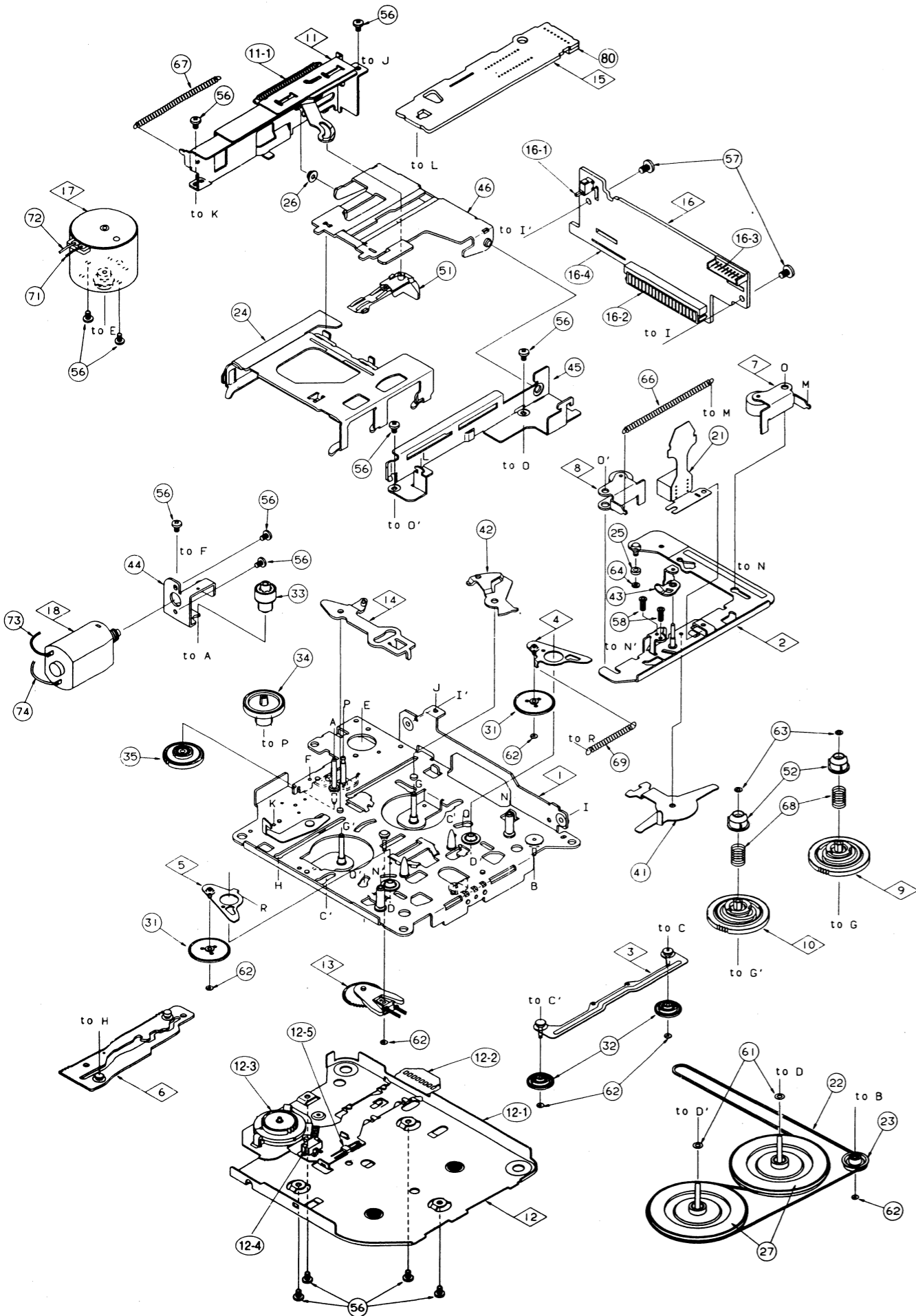
PU-9836A

PU-9836A



■ EXPLODED VIEW • PARTS LIST:

© Tape mechanism section 930-0735-00



NO	PART NO.	DESCRIPTION	QTY
1	960-4294-08	DECK PLATE-ASSY	1
2	960-4261-04	HEAD PLATE ASSY	1
3	960-4262-03	FF/REW-P-ASSY	1
4	960-4263-01	IDLER-P-ASSY F	1
5	960-4264-01	IDLER-P-ASSY R	1
6	960-4266-05	MODE PLATE-ASSY	1
7	960-4269-04	ROLLER ASSY F	1
8	960-4270-04	ROLLER ASSY R	1
9	960-4271-02	REEL ASSY F	1
10	960-4272-02	REEL ASSY R	1
11	960-4298-90	EJECT SUB-ASSY	1
11-1	750-2948-01	SW-PLATE SPRING	1
12	960-4296-90	BOTTOM SUB-ASSY	1
12-1	960-4295-02	BOTTOM P-ASSY	1
12-2	099-9548-00	FLEX PWB	1
12-3	013-3951-00	SWITCH	1
12-4	013-3953-00	SWITCH	1
12-5	051-1114-03	IC NJL5161K-P	1
12-6	746-0767-00	WASHER	2
13	960-4282-03	DETECT-SUB-ASSY	1
14	960-4301-02	PLAY-L-ASSY GF	1
15	099-9540-00	SIDE PWB	1
15-1	074-0881-08	OUTLET SOCKET*8P	1
16	990-0692-00	REAR-PWB-ASSY	1
16-1	013-3906-00	SWITCH	1
16-2	074-0978-20	OUTLET SOCKET*20P	1
16-3	076-0353-08	PLUG*8P	1
16-4	099-9541-00	PWB	1
17	SMA-130-100	DC-MOTOR*MAIN	1
18	SMA-131-100	DC-MOTOR*POWER	1
21	011-0307-28	HEAD	1
22	602-0118-00	BELT	1
23	604-0046-00	TENSION PULLEY	1

NO	PART NO.	DESCRIPTION	QTY
24	606-0101-05	PACK GUIDE	1
25	610-0342-01	HEAD-P-ROLLER	1
26	610-0343-00	GUIDE A ROLLER	1
27	611-0091-02	FLYWHEEL	2
31	613-0285-02	IDLER GEAR	2
32	613-0286-02	FF/REW GEAR	2
33	613-0288-01	HERICAL GEAR	1
34	613-0289-01	GEAR A	1
35	613-0290-00	POWER GEAR	1
41	630-2597-01	CHANGE LINK	1
42	630-2598-04	EJECT LINK	1
43	630-2600-01	ADJUST LINK	1
44	630-2601-02	MOTOR PLATE	1
45	630-2626-01	PWB FRAME	1
46	630-2605-01	GUIDE ARM	1
51	631-1992-01	PACK STOPPER	1
52	631-1993-01	SLIDE BUSH	2
56	716-0484-00	SCREW*M2X2.25 B	13
57	716-0761-01	SCREW	2
58	716-0833-10	AZIMUTH SCREW	2
61	746-0624-00	WASHER	2
62	746-0724-00	WASHER	6
63	746-0761-00	WASHER	2
64	746-0762-00	WASHER	1
66	750-2946-02	PINCH SPRING	1
67	750-2947-01	EJECT-P-SPRING	1
68	750-2949-00	SLIDE SPRING	2
69	750-3017-01	IDLER-P-SPRING	1
71	800-4911-60	VINYL-COAT-WIRE*BLK	1
72	802-4911-60	VINYL-COAT-WIRE*RED	1
73	806-4914-60	VINYL-COAT-WIRE*BLU	1
74	809-4914-60	VINYL-COAT-WIRE*WHT	1